

AMENDMENTS TO THE DRAWINGS

Applicants submit an annotated Drawing Sheet for Figs. 4-5, along with a Replacement Drawing Sheet for Figs. 4-5.

Fig. 4 shows the non-hollow composite fibers with multilateral cross-section, as shown by a microscope having a power of 12.5x20 (as described in Example 1 at page 7). A representative cap and a base are now annotated on Fig. 4.

Similarly, Fig. 5 shows the porous hollow composite fibers with polygonal multilateral cross-section, as shown by a microscope having a power of 12.5x20 (as described in Example 2 at page 7). A representative cap and a base are now annotated on Fig. 5.

No new matter is added.

Review and approval of the Replacement Drawing Sheet (Figures 4 and 5) is respectfully requested.

Attachments: Annotated Drawing Sheet (Figures 4 and 5)
Replacement Drawing Sheet

REMARKS

Claims 1-20 are pending in the application. Claims 7-20 have been withdrawn from consideration by the Examiner.

Reconsideration and review of the claims on the merits are respectfully requested.

Allowable Subject Matter

Applicants appreciate the Examiner's indication that claim 2 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. § 112, second paragraph, set forth in the Office Action.

Applicants respectfully submit that each of claims 1-6 is now allowable for the reasons given below.

***Applicants' Response to the Claim Rejections Under 35 U.S.C. § 112
and Objection to the Specification***

A. Claims 1-6 are rejected under 35 U.S.C. § 112, second paragraph, as allegedly being incomplete for omitting essential elements..

B. Claims 1-6 are rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite.

C. Objection to Specification: The specification is objected to for allegedly failing to provide an adequate written description and allegedly failing to provide an enabling disclosure.

The Examiner asserts that the specification as file fails to set forth 1) how to make a composite fiber of claim 1 with [sic] are one component and one additive” (page 2, 3rd paragraph).

D. Claims 1-6 are rejected under 35 U.S.C. § 112, first paragraph, for the reason given in the objection to the specification.

In response, Applicants have amended claim 1 substantially in accordance with the Examiner’s suggestion. Support can be found, for example, at page 5, lines 7-23 of the specification. No new matter is added. Entry of the amendment is respectfully requested.

Applicants submit that claims 1-6 directed to a functional composite fiber comply with the requirements of 35 U.S.C. § 112, first and second paragraphs, and Applicants respectfully request reconsideration and withdrawal of the rejections under 35 U.S.C. § 112 and withdrawal of the objection to the specification.

Applicants’ Response to the Objection to the Drawings

The drawings are objected to under 37 C.F.R. § 1.83(a). The Examiner states that the drawings must show every feature of the invention specified in the claims, including caps, base, porous hollow fiber with polygonal cross-section, and non-hollow fiber with multi lateral cross-section. The Examiner also states that Fig. 4 is unrecognizable and too dark.

In response, Applicants submit concurrently herewith an annotated Drawing Sheet for Figs. 4-5, along with a Replacement Sheet for Figs. 4-5. Please note that Fig. 4 shows the non-hollow composite fibers with multilateral cross-section, as shown by a microscope having a

power of 12.5x20 (as described in Example 1 at page 7). A representative cap and a base are now annotated on Fig. 4. Similarly, Fig. 5 shows the porous hollow composite fibers with polygonal multilateral cross-section, as shown by a microscope having a power of 12.5x20 (as described in Example 2 at page 7). A representative cap and a base are now annotated on Fig. 5. No new matter is added.

Accordingly, Applicants respectfully request approval of the Replacement Sheet for Figs. 4-5, along with reconsideration and withdrawal of the objection to the drawings.

Applicants' Response to the Claim Rejection Under 35 U.S.C. § 102(b)

Claims 1 and 3-6 are rejected under 35 U.S.C. § 102(b) as assertedly being anticipated by Largman et al. (U.S. Patent No. 5,057,368),

Applicants respectfully traverse the rejection on the basis that Largman et al. fails to disclose or render obvious the functional composite fiber of the present invention.

As previously noted, Claim 1 is amended to clarify Applicants' invention.

The present invention relates to a functional composite fiber comprising a plurality of T-lobes connected to each other at their bases. The caps of the T-lobes contain a first component, and their bases contain a second component including the first component and an additive. In addition, the caps must be substantially free of the second component. The additive is, therefore, not exposed on the surface of the fiber. Accordingly, the yarn guide and PU disc are not abraded by the additive. The quality of fiber produced can be maintained, and extraneous costs for

maintaining the abraded yarn guide and PU disc can be prevented (see page 2, lines 5-10 of the specification).

In comparison, Largman et al. discloses a polyester fiber comprising T-lobes in which the bases of the lobes are connected to one another forming a multilateral cross section. Largman et al. also discloses that “various optional ingredients which are normally included in fibers formed from thermoplastic polymers may be added to the mixture at an appropriate time during the conduct of the process” (see column 8, lines 24-33 of Largman et al.). However, Largman et al. does not disclose or suggest that the caps are substantially free of the second component as recited in claim 1 of the present application. In addition, Largman et al. does not provide any motivation to manufacture a functional composite fiber for preventing the abrasion of the yarn guide and PU disc. For these reasons, Applicants submit that claim 1 is novel and non-obvious over Largman et al.. Insofar as claims 3-6 depend from claim 1, Applicants’ submit that these claims are also not anticipated or rendered obvious by Largman et al.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the §102 rejection of claims 1 and 3-6 based on Largman et al. under 35 U.S.C. § 102(b).

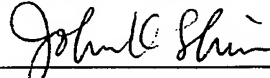
In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. §1.111
U.S. APPLN. NO. 10/715,505

ATTY DKT Q78529

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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CUSTOMER NUMBER

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FIG. 4



FIG. 5